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United States Patent [19]

Wei

[11] **Patent Number:** **5,528,963**[45] **Date of Patent:** **Jun. 25, 1996**[54] **RATCHET HAND TOOL**

[76] Inventor: **Hung-Yin Wei**, No. 21, Lane 225,
Taiping Road, Taiping Hsiang, Taichung
Hsien, Taiwan

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[58] Field of Search 81/438, 439, 177.5,
81/63, 63.2, 60, 61, 62

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Primary Examiner—Bruce M. Kisliuk
Assistant Examiner—Joni B. Danganan
Attorney, Agent, or Firm—Bacon & Thomas

[57] **ABSTRACT**

A ratchet hand tool including a stop plate and an urging element for controlling clockwise or counterclockwise of a ratchet being provided on two base plates which may be grip with the hand. One end of the ratchet is provided with a joint element having a ball and an elastic ring. A rotary element is fitted onto the joint element. When a longitudinal rod is inserted into the joint element to urge against the ball inside the joint element, the ball displaces outwardly to expand the elastic ring, which in turn urges tightly against the rotary element. In cooperation with a polygonal hole of the rotary element, the longitudinal rod is caused to turn when the rotary element is rotated, so that screws may be driven in or out quickly.

8 Claims, 8 Drawing Sheets